

Figure 1(B)

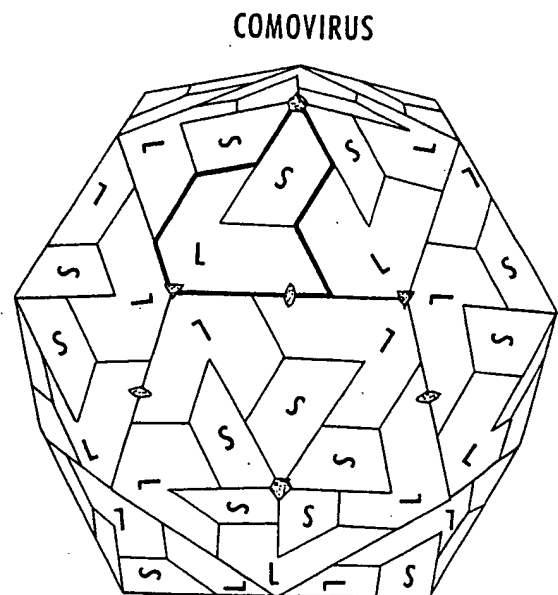


Figure 1(C)

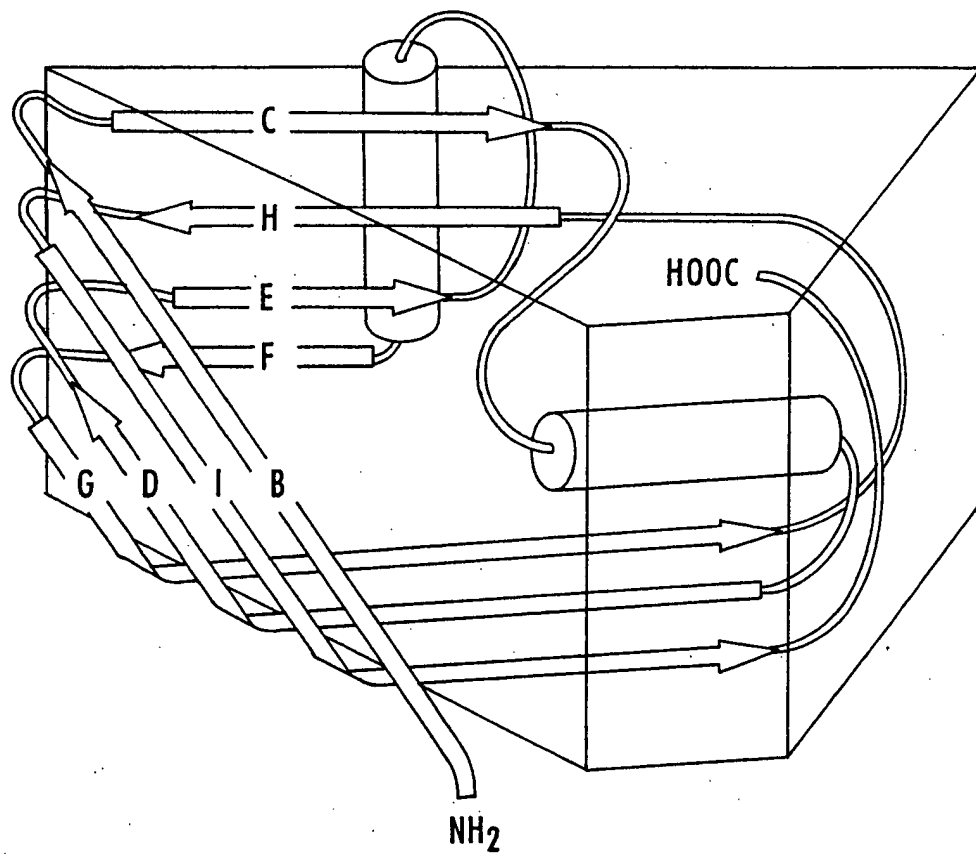


Figure 2

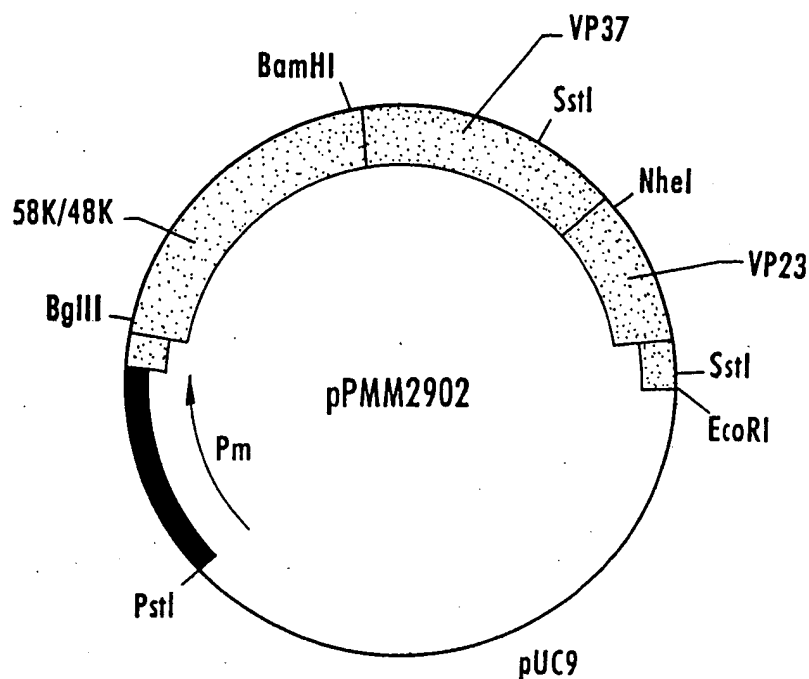


Figure 3(A)

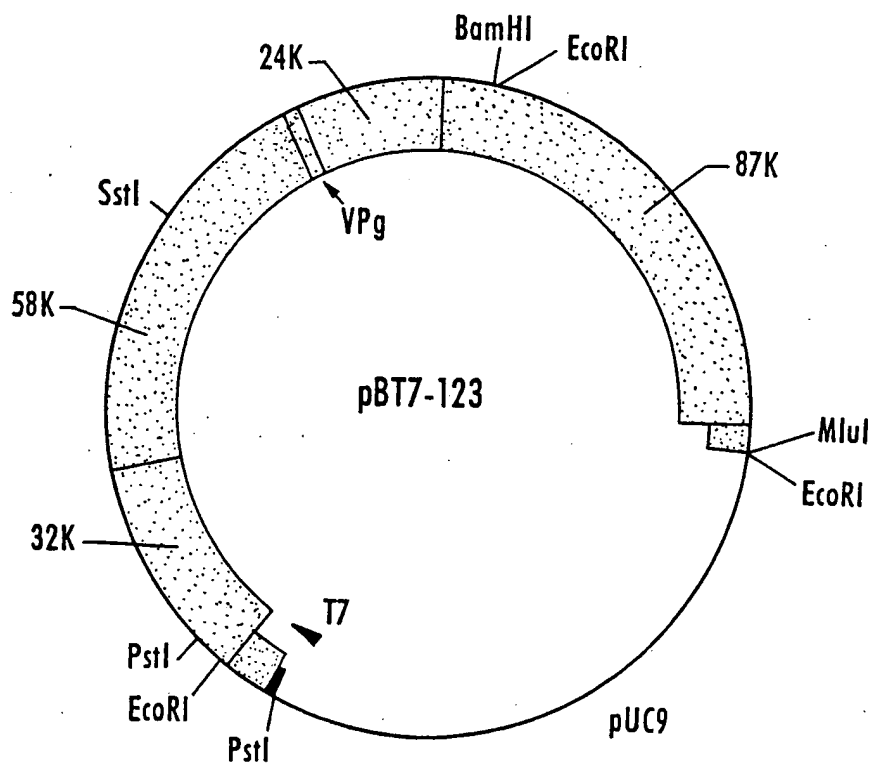


Figure 3(B)

1 5 10 15 20 25
G P V C A E A S D V Y S P C M I A S T P P A P F S
GGACCTGTTTGTGCTGAAGCCTCAGATGTGTATAGCCCATGTATGATAGCTAGCACTCCCTCGCTCCATTTC
2670 2700 NheI 2730

30 35 40
D V T A V T F D L I N G K I T (SEQ ID NO: 6)
GACGTTACAGCAGTAACTTTTGACTTAAATCAACGGCAAAATAACT (SEQ ID NO: 5)
2760

Figure 4

Figure 5(A)

(SEQ ID NO: 7)
(SEQ ID NO: 8)
S T Y S R N A V P N L R G D L Q V L A Q K V A R T L P
CTAGCACTTATAGTAAATGCTGTTCCCTAATTGAGAGGAGATCTTCAAGTTTGGCTCAAAAGGTTGCTCGGACTCTTC
GTGAATATCATCTTTACGACAAGGATTAAACTCTCCTCTAGAAAGTTCAAAACCGAGTTTCCAAACGAGCCTGAGAAGGATC
BglII (SEQ ID NO: 9)

Figure 5(B)

1 5 10 15
G P V C A E A S D V Y S P C M I A S T Y S R N A V P N
GGACCTGTTGTGCTGAAGCCTCAGATGTGTATAGCCCATGTATGATAGCTAGCACTTATAGTAGAAATGCTGTTCCCTAAT
2670 NheI
2700
2730
L R G D L Q V L A Q K V A R T L P S T P P A P F S (SEQ ID NO: 11)
TTGAGAGGAGATCTTCAAGTTTGGCTCAAAAGGTTGCTCGGACTCTTCCCTAGCACTCCTCCTGCTCCATTTC A (SEQ ID NO: 10)
BglII xNheI

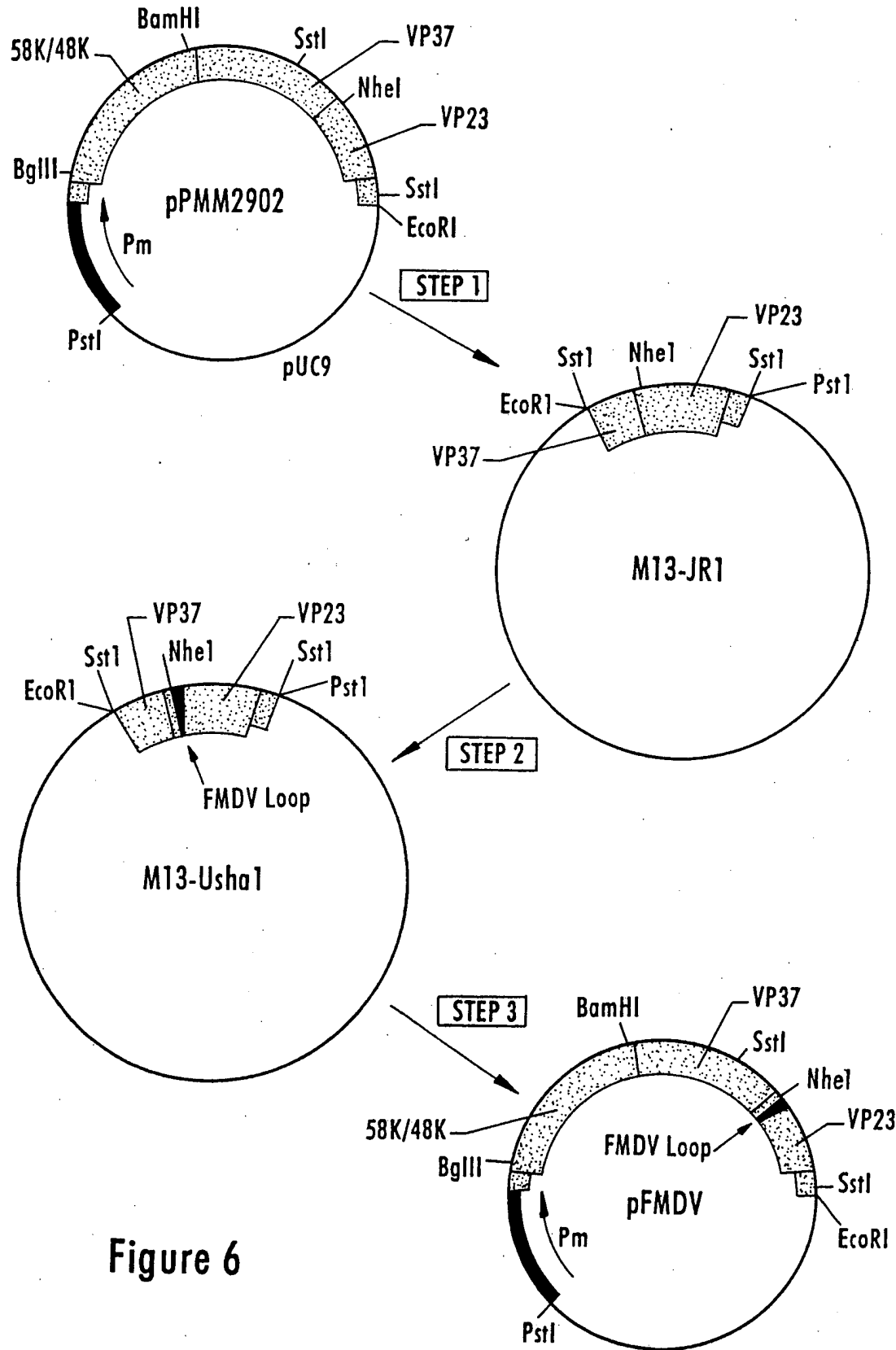


Figure 6

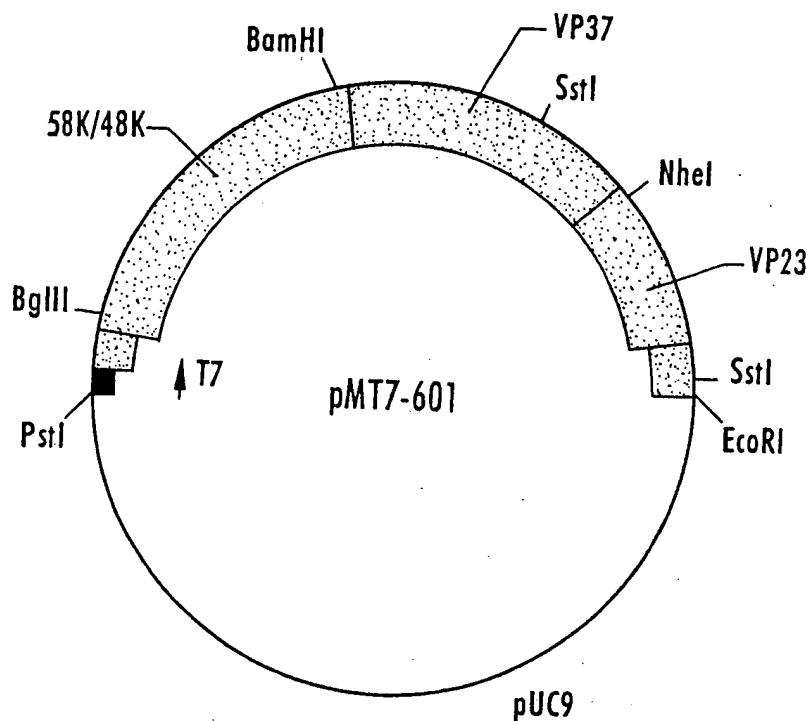


Figure 7

15 P C M I A S T P P A P F S D V T A V T F D L I (SEQ ID NO: 13)
20 CCATGTATGATAGCTAGCACTCCTCCTGCTCCATTTTCAGACGTTACAGCAGTAACCTTTGACTTAATC (SEQ ID NO: 12)
25 2700 NheI 2730 * 2760

Site-directed
Mutagenesis

15 P C M I A S T P P A P F S D V T A V T F D L I (SEQ ID NO: 15)
20 CCATGTATGATAGCTAGCACTCCTCCTGCTCCATTTTCAGACGTCACAGCAGTAACCTTTGACTTAATC (SEQ ID NO: 14)
25 2700 NheI 2730 AatII 2760

Figure 8

Figure 9(A)

S T D R P E G I E E G G E R D R S D (SEQ ID NO: 17)
CTAGCACTGACCGCCCTGAGGGCATCGAGGAAGAGGGCGGTGAGCGGATCGTGATCGTTCCGACGT (SEQ ID NO: 16)
GTGACTGGCGGACTCCCGTAGCTCCTTCTCCGCCACTCGCGCTAGCACTAGCAAGCC (SEQ ID NO: 18)
PvuI

Figure 9(B)

1 5 10 15 <----->
G P V C A E A S D V Y S P C M I A S T D R P E G I E
GGACCTGTTGTGCTGAAGCCTCAGATGTGTATAGCCCATGTATGATAGCTAGCACTGACCGCCCTGAGGGCATCGAG
2670 2700 NheI
-----> 30
E E G G E R D R D R S D V T A V T F D L I (SEQ ID NO: 20)
GAAGAGGGCGGTGAGCGCGATCGTGATCGTTCCGGACGTCACAGCAGTAACCTTTTGACTTAATC (SEQ ID NO: 19)
PvuI AatII 2760

Figure 10(A)

S T P A T G I D N H R E A K L D (SEQ ID NO: 22)
CTAGCACTCCTGCTACTGGAATCGATAATCATAGAGAAGCTAAATTGGACGT (SEQ ID NO: 21)
GTGAGGACGATGACCTTAGCTATTAGTATCTCTTCGATTTAACC (SEQ ID NO: 23)
Clal

Figure 10(B)

1 5 10 15 20 25 30 35
G P V C A E A S D V Y S P C M I A S T P A T G I D N
GGACCTGTTGTGCTGAAGCCTCAGATGTGTATAGCCCATGTATGATAGCTAGCACTCCTGCTACTGGAATCGATAAT
2670 2700 Nhe1 Clal
-----> 30 35
H R E A K L D V T A V T F D L I (SEQ ID NO: 25)
CATAGAGAAGCTAAATTGGACGTCACAGCAGTAACCTTTGACTTAATC (SEQ ID NO: 24)
Aat11 2760

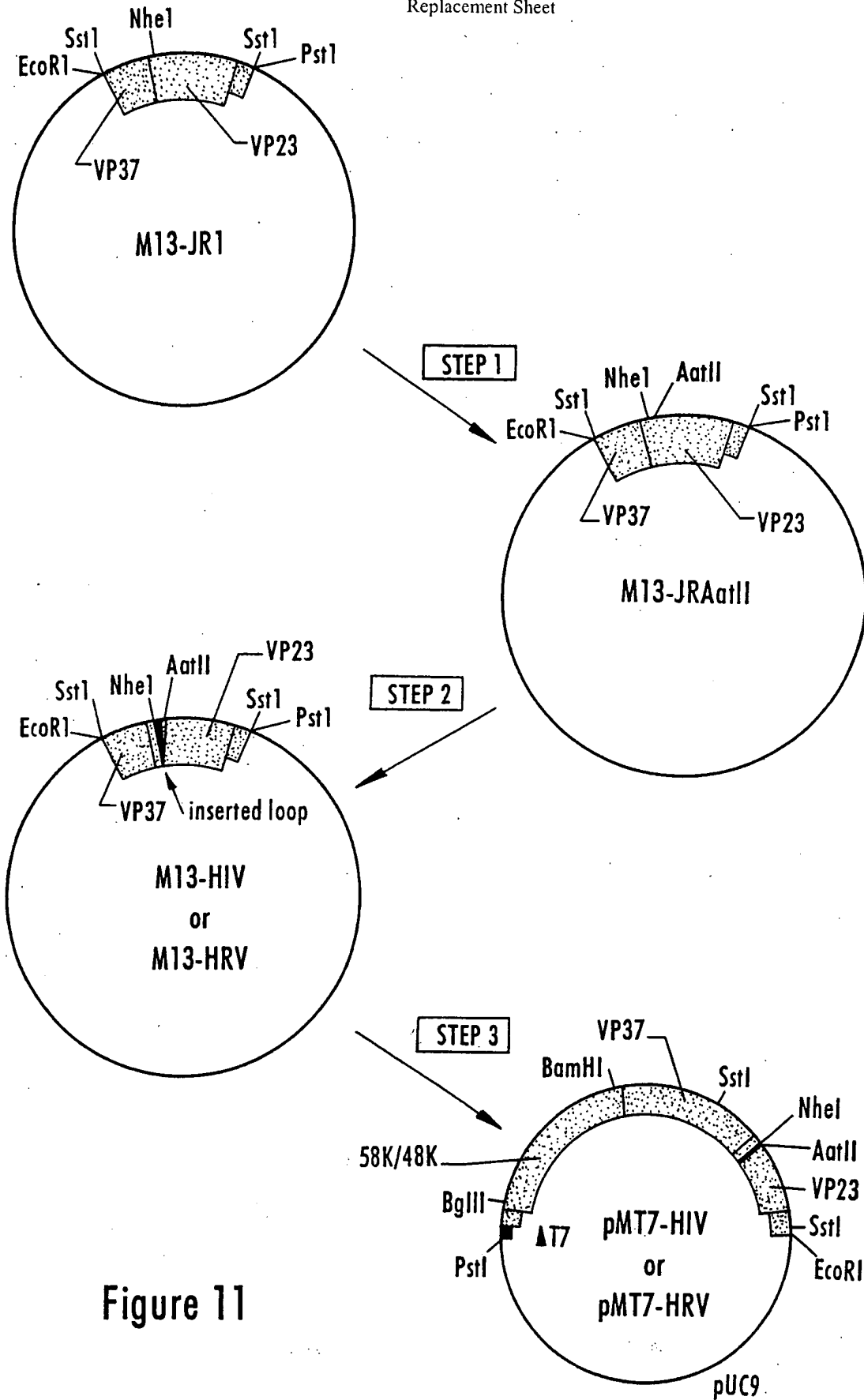


Figure 11

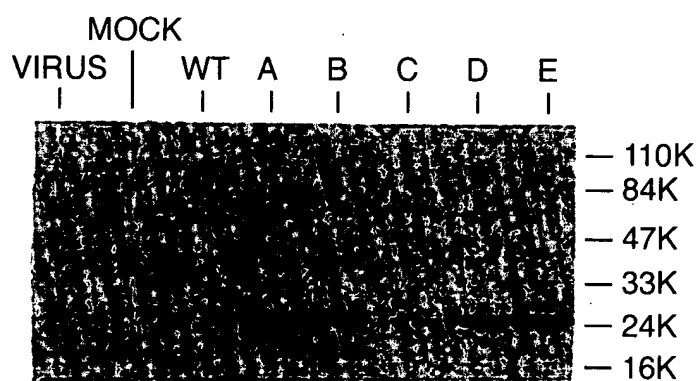


Figure 12